

TAUORO
PREAMPLIFIER
INSTRUCTION MANUAL

PLINIUS
THE HEART OF MUSIC



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PLINIUS
THE HEART OF MUSIC

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All operational, technical and descriptive material in this publication is subject to change at any time without notice. For further product information or queries, please contact your PLINIUS dealer.

PLINIUS products are designed and manufactured by Plinius Audio Limited, New Zealand.

www.pliniusaudio.com

INTRODUCTION

CONGRATULATIONS on your decision to become the proud owner of this PLINIUS Tautoro Preamplifier.

This manual has been prepared to help you understand the operation of your preamplifier, and to provide information about its design and the variety of ways it may be used.

We have designed and manufactured this preamplifier to reproduce your favourite music faithfully and accurately. With a little care and a full understanding of the operating recommendations in this manual, your PLINIUS Tautoro Preamplifier will provide years of high-quality, trouble-free performance.

SERIAL NUMBER _____

FINAL TEST CERTIFIED BY _____

IMPORTANT: PLEASE TAKE THE TIME TO READ THIS MANUAL THOROUGHLY BEFORE USING YOUR PREAMPLIFIER.

DESIGN PHILOSOPHY

From a distance you can see that the design of the Plinius products is more than an applied styling exercise to the front panel. We have started from the ground up to produce a casing for our electronics that is unrivalled in its physical strength and visual simplicity.

Wherever possible we have reduced the number of parts needed and then invested massively in refining and producing the remaining parts to the highest quality achievable with state of the art computer controlled machines allied with expert craftsman. Examples of this approach include the hydraulically formed corners on the amplifiers giving much greater strength and the one piece housing for the remote control that looks, feels and genuinely is robust.

As with music that you are not familiar with, truly innovative new designs can take time to understand and enjoy. How often have you heard music that you were first unsure of, that over repeated listening, has become a firm favourite.

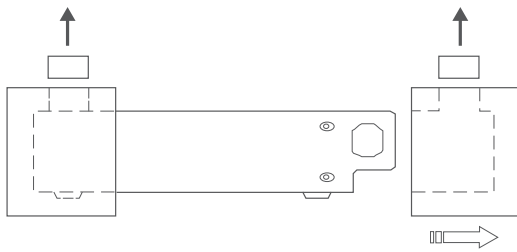
Our designs are fundamentally different to many other companies, and we hope that you will take the time to explore their unique character and qualities because we have not made them different simply to be different. We genuinely believe that their visual and tactile qualities do improve the experience of listening to music and that is our design goal!

The image shows a handwritten signature in black ink. The signature reads "ROSS.S" in a bold, cursive style. Below the signature is a thick, horizontal brushstroke that tapers at both ends, serving as a decorative underline.

Ross Stevens
DESIGN DIRECTOR.

UNPACKING

Open the box from the top and remove the accessories from the foam end caps. You may now proceed to lift the unit from the box. Once the unit is removed you can proceed with the removal of the foam end caps. These caps are designed to fit on the front and back of the unit for maximum protection. Retain the packaging for future transportation of the Tautoro.



PLACEMENT & VENTILATION

Your PLINIUS Tautoro may operate at a moderately high temperature, especially during extended listening sessions. The ideal location is upon a rigid stand, away from direct contact with any temperature sensitive materials, furniture or deep pile carpets. Ventilation through and around the amplifier should also be kept unimpeded. Please ensure that the heat vents (slots in the base and lid) are not covered or restricted in any way.

The PLINIUS Tautoro design incorporates a very high level of mechanical decoupling of the input and output. It can however still be influenced by acoustical feedback in the operating environment. The use of acoustic cones or a suitably spiked amplifier stand or table may further enhance the performance of this preamplifier. Consult your Plinius dealer for further advice if required.

PRECAUTIONS



PLEASE TAKE SPECIAL NOTE OF THE FOLLOWING PRECAUTIONS BEFORE OPERATING YOUR NEW PREAMPLIFIER.

This preamplifier operates at hazardous voltage levels. We recommend that any work requiring removal of the lid be referred to a suitably qualified and experienced service technician.

DO NOT attempt to connect any input of this preamplifier to its own outputs.

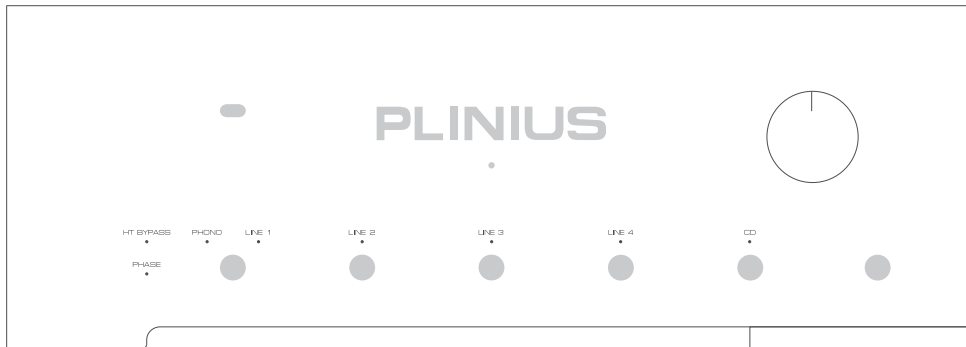
DO NOT earth any output terminal or connect any of these terminals together without following the instructions in this manual or seeking qualified assistance.

DO NOT place this preamplifier in any position where liquids or any foreign material may accidentally enter it.

DO NOT connect any voltage source, short circuit, earth/ground or appliance (other than suitable audio power amplifiers) to the preamplifier output terminals.

DO NOT connect any voltage source, short circuit, earth/ground or appliance (other than suitable audio source components) to the preamplifier input terminals.

PREAMPLIFIER FEATURES – FRONT PANEL



ABOVE: Tautoro front panel layout

DISPLAY LED

An LED on the front panel indicates that the power is on. When first switched on, the unit will go into standby and the display LED will vary in brightness. When the unit is taken out of standby and is ready for use, the LED will remain lit. Whenever mute or a remote volume button is pressed, the LED will dim.

SOURCE SELECTION BUTTONS

The buttons on the front panel allow selection of any of the five different inputs available on the rear panel. This selection is fed to the outputs of the preamplifier.

SOURCE DISPLAY LEDS

These small white LEDs communicate the current source selection.

NOTE: the Phono/Line 1 input displays the current installed option relating to this input. If you have a Tautoro with a phono option installed, the phono LED will light to indicate this. If the phono option is not installed, the Line 1 LED will light.

PHASE DISPLAY LED

This small white LED is ON when the phase of the input signal to the preamplifier is inverted 180 degrees. This option is selected using the remote control.

HT BYPASS LED

This small white LED is ON when the current source selection is the HT Bypass Input. This input can be selected using the remote control, or when the unit is taken out of standby via the remote trigger input.

HEADPHONE SOCKET

The socket below the volume control is for connection to a set of suitable hi-fidelity headphones with 6.35mm (1/4 inch) jack.

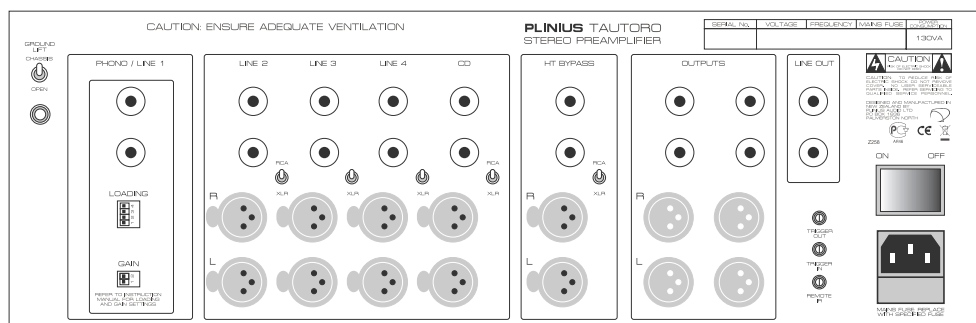
VOLUME CONTROL KNOB

The volume control is a motorised unit that will accurately convey the selected source signal to the line stage of the PLINIUS Tautoro. When using the remote control to alter the volume level, briefly press the button to make small adjustments, or hold the button down to continuously adjust the volume.

PREAMPLIFIER FEATURES – REAR PANEL

This panel incorporates all the terminals for connecting the input signals from your CD player, tuner, etc, the outputs to the power amp and the mains supply.

Please remember that your PLINIUS Tautoro Preamplifier is a high quality electronic instrument. Be sure that you read and fully understand the section "Installation and Operation" before you make any connection to this Preamplifier.



ABOVE: Tautoro rear panel layout

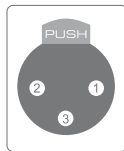
INPUT TERMINALS

The input terminals of your PLINIUS Tautoro Preamplifier are easily accessible along the rear panel.

RCA INPUTS LEFT & RIGHT: These standard RCA terminals are for use with unbalanced signals from any line level audio component such as a compact disc player, tuner, surround processor, VCR, etc.

XLR BALANCED INPUTS LEFT & RIGHT: Also included are balanced XLR inputs for use with any Line Level component that features Balanced XLR outputs. Balanced signals are carried via a three way cable that connects all three pins at each end of the interconnect cable.

The XLR input pin configuration used in all Plinius products is as follows:



- PIN 1 to GND
- PIN 2 to +Signal
- PIN 3 to -Signal

NOTE: Because of the way balanced XLR inputs are configured it is not possible to connect both XLR and RCA at the same time.

INPUT SELECT SWITCH

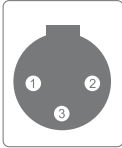
This switch located between the RCA and XLR connectors is used to select the pair of input sockets required, as described above. Up selects the RCA input connections, while down select XLR input for each individual source.

HT BYPASS INPUT

This input is for use specifically with home theatre processors. In some circumstances you may wish to use the power amplifier and speakers that the Tautoro is connected to as the front two channels of a surround or home theatre environment. The processor input can be used for this purpose, as any signal connected to the processor inputs can be sent directly to the power amplifier bypassing the Tautoro entirely.

OUTPUT TERMINALS

Connections for power amplifiers are provided on the rear panel. Connections are available for both single ended RCA and balanced XLR cables. Note that the only time the outputs aren't 'live' is when the preamplifier is in mute or standby. The XLR output pin configuration used in all Plinius product is:



PIN 1 to GND
PIN 2 to +Signal
PIN 3 to -Signal

NOTE: Because of the way balanced XLR outputs are configured it is not possible to connect both XLR and RCA at the same time.

LINE OUT

These RCA outputs are situated next to main outputs and are provided to interface to line level recording devices for archiving, or transferring to portable media. The outputs are always live with the signal of whichever source is selected at the time of recording.

MAINS SWITCH

The heavy-duty rocker switch to the right of the panel turns the Mains/Line Power to the amplifier ON or OFF. The amplifier draws a moderately high current when switched on, so it is not good practice to rapidly turn the Mains switch on and off repeatedly.

MAINS POWER CORD IEC SOCKET

This connector is where the mains supply cable from your wall connects to the preamplifier. A fuse holder is mounted within this connection, and it holds a mains fuse to provide surge and overload protection for your preamplifier.

REMOTE TRIGGER INPUT SOCKET

In order to integrate more effectively into a home theatre system, the PLINIUS Tautoro has a remote trigger input socket fitted to the rear panel. By connecting a processor with a remote trigger signal to this socket, the Tautoro can be put in and out of standby by the processor to which it is connected. When in standby the amplifier draws less current and will operate at minimum temperature. This may be of advantage in a multi-amplifier and/or remote installations. When taken out of standby, the unit will default to 'HT Bypass' mode.

REMOTE TRIGGER OUTPUT SOCKET

The Tautoro also features a remote trigger output socket fitted to the rear panel. By connecting this trigger output to the power amplifier, the entire system can be put in and out of standby by the processor.

REMOTE IR SOCKET

This socket is for connecting to an external remote control sender. Some companies such as Xantech manufacture these devices to enable multi-room remote control. Please see your Plinius dealer for further advice.

GROUND LIFT SWITCH

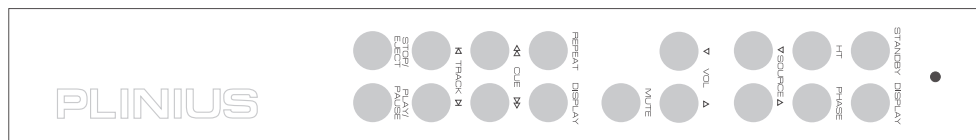
This switch allows the signal ground to be disconnected from the chassis. In some installations a hum loop may exist due to duplicate ground paths from different equipment. Use this switch to remove the connection from 0V to ground thus allowing some flexibility in your particular set-up.

EARTH POST

This is a chassis connected gold-plated earth post for use with most vinyl turntables.

PREAMPLIFIER FEATURES – REMOTE

The Tautoro features a full function remote to control all settings and configurations, and also has complete controls for operating the PLINIUS CD101 Compact Disc Player. This section details the buttons of the Tautoro remote and how they are used.



ABOVE: Tautoro remote control layout

STANDBY

Standby is used to put the unit into a low power mode. This disconnects the outputs of the preamplifier and turns off the white display LED's.

DISPLAY

The display button on the remote enables you to adjust the display brightness of the white LED's. Pressing the display button repeatedly will dim the LED through the four levels of

brightness then off. The next press of the button will cycle the display back to full brightness.

HT BYPASS

The HT Bypass button activates the Tautoro Home theater bypass mode. After pressing this the Tautoro is bypassed and the signal is direct from the HT Bypass input to the outputs.

NOTE: Because the Tautoro is bypassed in Processor mode the only buttons that continue to function are standby and display. For more information refer to "Using the HT Bypass Input" in the "Installation and Operation" section.

PHASE

The phase of the input signal to the preamplifier is toggled from absolute to inverted 180 degrees with each press of this button.

SOURCE SELECTION

The source selection buttons enable changing from one input to another when needed and can be scrolled left or right to select the desired source. On reaching the left most or right most input, the selection will scroll in a continuous loop with the next button press.

VOLUME CONTROL

Use these two buttons to control the volume level of the preamplifier. The right side button increases volume, while the left side button decreases the volume. Briefly press either button to make fine adjustments to the volume level. Hold down either button to continually adjust the volume level.

MUTE

Pressing this button toggles the PLINIUS Tautoro in and out of mute.

CD101 COMPACT DISC PLAYER CONTROLS

REPEAT

Press this button and the repeat light on the front panel will light. The CD101 will now play all tracks on the Compact Disc as normal, but then repeat all tracks from track 1 in an endless loop. It does not repeat one track only, it repeats the entire contents of the Compact Disc.

DISPLAY

The display button on the remote enables you to quickly adjust the display brightness. Use this button to toggle between high, low, and off settings. Note that whenever the CD drawer is ejected to change a Compact Disc, the display will automatically revert to full brightness.

CUE BUTTONS

Use these two buttons to cue through the track you are listening to. Press and hold the right side button to cue forward through the track, or press and hold the left side button to cue backwards through the track. Once the start or end of the track is reached, Cue will continue into the next track.

TRACK BUTTONS

When playing a Compact Disc: Use these two buttons to go forward (right side button) or back (left side button) through the tracks on the Compact Disc. Press the button once to skip to the next track on the Compact Disc, or hold down to skip through multiple tracks. When you press the back button once the CD101 will revert to the start of the current track. Pressing the back button again will skip back to the previous track.

When the CD is not in play mode use these two buttons to go forward (right side button) or back (left side button) through the tracks on the Compact Disc. Press the button once to skip to the next track on the Compact Disc, or hold down to skip through multiple tracks. The track currently selected will be brightly lit.

STOP/EJECT

If the Compact Disc player is playing a Compact Disc, pressing this button will stop play and return to track 1. Pressing the button again will open the CD drawer so the Compact Disc can be changed.

PLAY/PAUSE

Press the Play button to begin playing the Compact Disc at the track selected. The display LED corresponding to the track that is being played will vary in brightness. Press the Play button again, and the track will pause, designated by the LED flashing. If the CD drawer is open, pressing play will shut the drawer and start playing the Compact Disc from track 1.

INSTALLATION & OPERATION



WARNING: RISK OF ELECTRIC SHOCK

This preamplifier operates at hazardous voltage levels. We recommend that any work requiring removal of the lid be referred to a suitably qualified and experienced service technician. **DO NOT** place this amplifier in any position where liquids or any foreign material may accidentally enter it.



CAUTION!

PLEASE READ AND UNDERSTAND THE PRECAUTIONS IN THE INSTRUCTION MANUAL FOR THE POSITION AND OPERATION OF YOUR PLINIUS PREAMPLIFIER.



CONNECTIONS

Connections to your PLINIUS Tautoro should be made in the same order as they are listed in this section. **DO NOT** attempt to connect your PLINIUS Tautoro until you have read and fully understood these instructions.

Although these instructions refer to the connection of the Tautoro to line level source components, the Tautoro can also be safely installed into multimedia systems by following the same installation guidelines. Should you require further assistance, please contact your Plinius dealer.



SOURCE COMPONENT INPUTS

Connect your Source to the input of the PLINIUS Tautoro using suitable single-ended RCA or Balanced XLR interconnect cables only. For RCA, make sure you connect the red coded cable to the red RIGHT RCA input, and the white (or black) cable to the white LEFT RCA input. Also make sure the RCA connectors are a snug fit and are inserted all the way in. For XLR input connection, make sure you connect the RIGHT XLR input and LEFT XLR inputs to the right and left outputs from your source respectively. Also make sure the XLR connectors click into place.

Use the input select switch to select RCA if you are using single ended RCA cables or to select XLR if you are using Balanced XLR cables.

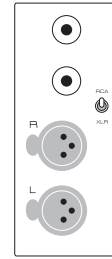
NOTE: DO NOT connect XLR and RCA at the same time, use only one or the other. For units with optional phono installed, connect the phono/Line 1 input to a suitable audio turntable only.



Source Component Output



Interconnects



Tautoro Input

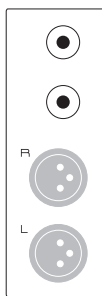


OUTPUT TERMINALS

The connection of the outputs of the PLINIUS Tautoro must be made by an 'instructed person' or by suitable ready made interconnect cables only. Connections for power amplifiers are provided at the rear of the unit. If using single-ended RCA outputs, connect your Tautoro to the RCA inputs on the back of the power amplifier. Make sure you connect the red coded cable to the red RIGHT RCA output, and the white (or black) cable to the black LEFT RCA output. Also make sure the RCA connectors are a snug fit and are inserted all the way in.

For XLR output connection, make sure you connect the RIGHT XLR output and LEFT XLR output to the right and left inputs of your Power Amplifier respectively. Also make sure the XLR connectors click into place.

NOTE: DO NOT connect XLR and RCA at the same time, use only one or the other. The only time the outputs are not 'live' is when the preamplifier is in mute or standby.



Tautoro Output



Interconnects



Power Amplifier Input

TERMINATION QUALITY

Quality of the connections must be examined to ensure that high-performance, trouble-free operation is enjoyed. Check that all interconnection cables are snug fitting and inserted all the way in. In the case of balanced XLR sockets, ensure that they click in positively.

PHASING (OR POLARITY)

It is important to achieve good stereo imaging in your listening room. By observing the wiring instructions above, each preamplifier/power amplifier/loudspeaker combination should be in phase. If you experience poor stereo image and/or a lack of bass, check that all interconnection cables and loudspeaker wires have been connected correctly. We recommend that you use one of the easily obtainable 'test discs' to help you ensure both phasing and channel orientation are correct. If in doubt, consult your Plinius dealer for advice.

Naturally it is also important to make sure all the leads carrying signals for the RIGHT channel loudspeaker are connected to the RIGHT input to the amplifier from your preamplifier or CD player etc. Signals for the LEFT channel should be wired in a similar fashion.

USING THE HT BYPASS INPUT

The Tautoro Preamplifier features a home theatre input to bypass the Tautoro when used in home theatre or multimedia installations. When HT Bypass is selected on the Tautoro, the signal will pass from the Tautoro HT Bypass input directly to the Tautoro outputs.

This enables the Tautoro to remain in circuit for use with two channel sources (such as CD players and tuners), as well as a link to the power amp and speakers should you wish to use your normal stereo set-up in a surround or home theatre environment.

To access the HT Bypass input, press the HT Bypass button on the remote control. To exit the HT Bypass mode and return to using a source component, press the remote button that corresponds to that source component.

NOTE: When HT Bypass is selected, no volume or phase settings can be accessed. A signal connected to the HT Bypass input will go to BOTH the RCA and XLR outputs.



CONNECTING THE MAINS SUPPLY

Firstly, check that the mains supply voltage printed on the rear of this amplifier is similar to the mains supply voltage in your area. If in doubt, please consult your Plinius dealer. Mains supply power connection is via the plug-in lead supplied with your PLINIUS Tautoro.

Check the wall outlet is switched OFF, then connect the local mains plug end of the lead to the wall outlet. Check the Tautoro is switched OFF, and connect the IEC end of the cable to the IEC socket at the back of the Tautoro. With the cord fully connected, switch the wall outlet ON.

Now that your PLINIUS Tautoro Preamplifier is configured correctly, switch the power switch on the rear panel to ON. The power LED will vary in brightness indicating the unit is in standby. Use the front panel buttons or the source or standby buttons on the remote to take the unit out of Standby. You can now enjoy your new PLINIUS Tautoro Preamplifier.

NOTE: This unit must be connected to a mains socket outlet with a protective earthing connection. The wall outlet socket or mains switch must be accessible at all times in case of emergency.

WARM-UP PERIOD

You will find that the PLINIUS Tautoro will become noticeably 'purer' in sound after being on for a period of time. We usually recommend waiting at least 24 hours before expecting the best quality of sound reproduction from your preamplifier. Also, as the PLINIUS Tautoro uses very little power while on, we suggest leaving the unit turned on (but in standby mode while not being used) so that it will always be at its sonic best.

TAUTORO FEATURES

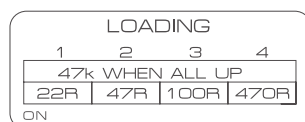
OPTIONAL PHONO INPUT

The PLINIUS Tautoro is available as a full line level preamplifier, or with an optional phono level input installed. The Phono level circuitry is installed at the factory in the input section of the rear panel labelled "phono/line 1" and on selecting this input, the front panel display will indicate the input is indeed phono level.

The phono input has a total of four gain settings and five cartridge load settings:

PHONO CARTRIDGE LOADING ADJUSTMENT

The phono cartridge load can be adjusted to suit your particular phono cartridge, using the 4-way mini-switches labelled 'LOADING'.



The switch body shows an arrow indicating the direction for the switch to be 'ON'. The switches allow the load impedance to be set to suit your particular phono

cartridge. Once the correct loading value has been determined, use the corresponding mini-switch to set the load value to one of 470R, 100R, 47R, or 22R. With none of the switches ON, the loading will be set to 47K. Please consult your cartridge manufacturer for specific recommendations.

PHONO GAIN ADJUSTMENT

The Tautoro Phono input can also be set to one of four gain settings to suit your phono turntable specifications using the 2-way mini-switches labelled 'GAIN'.

These 2-way mini-switches allow the gain to be adjusted as low as 50dB, to suit high output Moving Magnet (MM) cartridges, or as high as 66dB for low output Moving Coil (MC) cartridges. The four possible gain configurations are as follows:



The switch body shows an arrow indicating the direction for the switch to be 'ON'.

Switch '1' is the 6dB adjustment. With Switch '1' ON there is an additional 6dB. Used within the 50dB range this will increase the gain from 50dB to 56dB. Used within the 60dB range it will increase the gain from 60dB to 66dB.

Switch '2' is the 10dB adjustment. With switch '2' ON the gain will be increased from the 50dB range to the 60dB range.

REMOTE CONTROL

Provided with your PLINIUS Tautoro is a 17 function remote control. Two AAA batteries power the remote, and these are replaced by removing the two screws on the base of the remote that hold the battery compartment in place. The bottom end of the remote is now free to slide out for access to the batteries. Replace the two batteries, taking care to refit the new ones with correct polarity.

HEADPHONE SOCKET

The PLINIUS Tautoro features an internal headphone amplifier for connection to a set of suitable hi-fidelity headphones with 6.35mm (1/4 inch) jack. The headphone output is situated at the lower right of the unit and is live at all times, except when the unit is in standby or HT Bypass mode. This allows the unit to be in mute, disconnecting the output to the power amplifier and speakers while using headphones. Headphone volume can be adjusted with the main volume control.

MAINS/LINE FUSE

A Mains/Line fuse is fitted within the IEC socket on the rear of the preamplifier. A small drawer at the bottom of this socket may be removed (after the IEC plug is removed) by levering it out with a flat blade screwdriver. The fuse fitted should be rated at no greater than that specified on the rear panel.

IMPORTANT: DO NOT FIT A FUSE WITH A HIGHER RATING.

NOTE: Fuse failure may indicate a severe problem. Should the amplifier continue to exhibit mains fuse failure contact your Plinius dealer.

SPECIFICATIONS

FREQUENCY RESPONSE

20Hz to 20kHz +/-0.2dB

DISTORTION

Typically <0.05% THD at rated input level

HUM AND NOISE

-80dB at rated input level, A Weighted

INPUT SENSITIVITY FOR RATED OUTPUT

125mV RMS unbalanced. 62mV RMS balanced

INPUT IMPEDANCE

50kW

RATED OUTPUT LEVEL

500mV RMS into 10kW or higher

OUTPUT SOURCE IMPEDANCE

Typically 100W

OPTIONAL PHONO INPUT:

RCA UNBALANCED INPUT

ADJUSTABLE GAIN 50dB, 56dB, 60dB, 66dB

ADJUSTABLE LOAD 47k, 470R, 100R, 47R, 22R

FREQUENCY RESPONSE +/-0.2dB 20Hz to 20kHz, within RIAA spec

SIGNAL TO NOISE RATIO -80dB wrt 5mV input, A weighted

DISTORTION Less than 0.01% THD at all levels below clipping

HEIGHT	160mm	(6 3/8")
WIDTH	445mm	(17 1/2")
DEPTH	475mm	(18 3/4")
WEIGHT	16kg	(35.3lbs)

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